Status of Calibration/Validation for AIRS Version 4.0 Data Products				
Parameter	Non-Polar|lat| ≤ 50°, no ice or snow cover			
	Land		Ocean	
	Day	Night	Day	Night
L1B Radiance Product				
AIRS	Calibrated	Calibrated	Calibrated	Calibrated
AMSU	Calibrated[1]	Calibrated[1]	Calibrated[1]	Calibrated[1]
HSB	Calibrated[2]	Calibrated[2]	Calibrated[2]	Calibrated[2]
Level 2 Standard Products				
Cloud-Cleared Radiances		Validated	Validated	Validated
TsurfStd			Validated	Validated
emisIRStd				
OLR				
TairStd	Validated[3]	Validated[3]	Validated[3]	Validated[3]
H2OMMRStd	Validated[3]	Validated[3]	Validated[3]	Validated[3]
totH2OStd	Validated[4]	Validated[4]	Validated	Validated
O3VMRStd				
totO3Std	Validated[4]	Validated[4]	Validated	Validated
PCldTopStd			Validated	Validated
CldFrcStd			Validated	Validated

[1]Sidelobe corrections have not been applied to AMSU radiances in V4 to derive brightness temperatures from antenna tempertures. Comparisons of AMSU antenna temperatures with non-polar calculated brightness temperatures exhibit differences of up to 3 K, which for the tropospheric channels are consistent in sign and magnitude with the hypothesis that the biases are due to sidelobe effects.

[2]Sidelobe corrections have not been applied to HSB radiances in V4, but they are sufficiently small that it is unnecessary to differentiate between antenna temperature and brightness temperature. Validation using radiosondes in non-polar regions shows biases well under 1 K for all channels.

[3]Retrievals exhibit greater uncertainty at altitude < 3 km for these profile quantities (i.e., users should be cognizant of quality flag, Qual_Temp_Profile_Bot)

[4]Known large positive biases over desert surfaces

[5]Not Validated In V4